

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

J1017 U.S. PRO
10/084507
02/28/02



In re the Application of:

MUNROE et al. - Group Art Unit: 1647 (expected)

Application No.: Not yet assigned
(continuation of 09/222,995) Examiner: R. Deberry (expected)

Filed: February 28, 2002 Attorney Dkt. No.: 108074-00023

For: AN ISOLATED HUMAN EDG-4 RECEPTOR (AS AMENDED)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

February 28, 2002

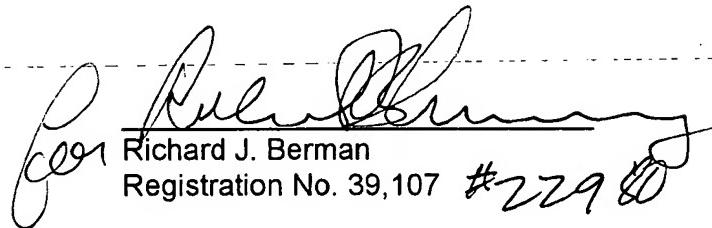
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the information items listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each item is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the items be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date, OR (b) before the mailing date of a first Office Action on the merits in the present application, OR (c) accompanies a Request for Continued Examination. No certification or fee is required.
- 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our check in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(i)(1). Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300 as needed to ensure consideration of the disclosed information.

4. These references were cited by or submitted to the Office in parent application No. 09/222,995, filed December 30, 1998, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these references are not attached. 37 CFR § 1.98(d).

Respectfully submitted,



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Enclosure: PTO-1449 form (2)

FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 108074-00023	SERIAL NO. Not yet assigned
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT MUNROE, et al.			
		FILING DATE Herewith	GROUP 1647 (expected)		

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA	5,585,476	12/1996	MacLennan			PTO
	AB	5,856,443	01/1999	MacLennan			5.17.02
	AC						U.S. 08/4507
	AD						11/17/02
	AE						02/28/02
	AF						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION		
							YES	NO	PART.
	AG	WO 99/54351	10/1999	PCT					
	AH	WO 98/53062	11/1998	PCT					
	AI	WO 97/00952	01/1997	PCT					
	AJ								
	AK								
	AL								

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AM	AF034780 - GenBank Database Entry, MacLennan et al., from Mol. Cell. Neurosci. 5 (3), 201-209 (1994)
AN	AA804628 - GenBank Database Entry, NCI Cancer Genome Anatomy Project (1997)
AO	RNU10699 - GenBank Database Entry, Okazaki et al., from Biochem. Biophys. Res. Commun. 190, 1104-1109 (1993)

EXAMINER	DATE CONSIDERED
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

1017 U.S. PRO 10/08/97 02/28/02

AA	AA827835 - GenBank Database Entry, NCI Cancer Genome Anatomy Project (1997)
AB	AA834537 - GenBank Database Entry, NCI Cancer Genome Anatomy Project (1997)
AC	AA767046 - GenBank Database Entry, NCI Cancer Genome Anatomy Project (1997)
AD	N93714 - GenBank Database Entry, Hillier et al., from Genome Res. 6 (9), 807-828 (1996)
AE	SHAHRESTANIFAR, et al., "Lysophosphatidic Acid Activates NF- κ B in Fibroblasts", The Journal of Biological Chemistry, Vol. 274, No.6, pp 3828-3833 (1999)
AF	YAMAGUCHI, et al., "Molecular Cloning of the Novel Human G Protein-Coupled Receptor (GPCR) Gene Mapped on Chromosome 9", Biochemical and Biophysical Research Communication, 227, pp. 608-614 (1996)
AG	MACLENNAN, et al., "Cloning and Characterization of a Putative G-Protein Coupled Receptor Potentially Involved in Development", Molecular and Cellular Neurosciences, 5 pp 201-209 (1994)
AH	AN, et al., "Molecular Cloning of the Human Edg 2 Protein and Its Identification as a Functional Cellular Receptor for Lysophosphatidic Acid", Biochemical and Biophysical Research Communications 231, pp 619-622 (1997)
AI	SHATROV, et al., "Sphingosine-1-phosphate Mobilizes Intracellular Calcium and Activates Transcription Factor NF- κ B in U937 Cells", Biochemical and Biophysical Research Communications, 234, pp.121-124 (1997)
AJ	DOERKS et al., "Protein annotation: detective work for function prediction", Trends in Genetics 14:248-250 (1998)
AK	SMITH et al., The challenges of genome sequence annotation or "The devil is in the details", Nature Biotechnology 15:1222-1223
AL	BRENNER et al., "Error in genome annotation", Trends in Genetics 15:132-133 (1999)
AM	BORK et al., "Go hunting in sequence databases but watch out for the traps", Trends in Genetics 12:425-427 (1996)

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AA	WELL, JA "Additivity of Mutational Effects in Proteins", Biochemistry 29:8509-8517 (1990)
AB	NGO et al., "Computational Complexity, Protein Structure Prediction and the Levinthal Paradox", The Protein Folding Problem and Tertiary Structure Prediction", 492-495 Birkhauser Boston (1994)
AC	BORK P., "Powers and Pitfalls in Sequence Analysis: The 70% Hurdle" Genome Research 10:398-400 (2000)
AD	SKOLNICK et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era", Trends in Biotech 18(1): 34-39 (2000)
AE	MACLENNAN et al., "Cloning and Characterization of a Putative G-Protein Coupled Receptor Potentially involved in Development", Molecular and Cellular Neurosciences 5:201-209 (1994)
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